

REMARKS

Claims 1-7 are pending and under consideration in the above-identified application.

In the Final Office Action dated June 3, 2008, the Examiner rejected claims 1-7.

With this Amendment, claims 1 and 5 were amended. No new matter has been introduced as a result of the amendments. Support for the amendments can be found on at least page 20 of the Specification.

I. 35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 1 and 4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nagura et al. (JP 2002 373643), or in the alternative as obvious under 35 U.S.C. § 103(a). Applicants respectfully traverse this rejection.

The claims require a mechanofused mixture including an inorganic compound and a carbonaceous material on at least part of each surface of the base particles. Mechanofusion is a technique for particle-to-particle fusion that generates a mechanical-chemical reaction between two or more materials. Particles that are mechanofused create a new material with different chemical properties. For example, mechanofusion is used to achieve a drug powder that is less susceptible to formation of solid bridges and related instability such as via re-crystallization *See* Morton U.S. Publication No. 20080063719. Mechanofusion is also used to create a capsulated toner with a core particle that is coated with a second material via mechanofusion. *See* Yasuhiro et al., U.S. Publication No. 20070259284. The claims also require that the mechanofused mixture is adhered to the base particles via shearing and compressive stress.

Nagura et al. teaches a positive active material with a coating layer made of an inorganic lithium compound. Nagura et al, Paragraphs [0010] and [0023]. As discussed above, the claims require a mechanofused mixture on at least part of each surface of the base particles. A mechanofused mixture is a new material generated by a mechanical-chemical reaction between

the particles. Thus, much like a sintered material is not the same as an unsintered material, even if mechanofusion is considered a product-by-process type limitation, the prior art structure is not the same as the physical structure required by the claims. This is because a mechanofused mixture of an inorganic compound and a carbonaceous material creates a new material with different chemical properties than a mixture of inorganic compounds and carbonaceous material. Nagura et al. does not teach or even fairly suggest a mechanofused mixture as required by the claims. As such, claims 1 and 4 are patentable over the cited reference. Accordingly, Applicants respectfully request that the above rejection be withdrawn.

II. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagura et al. in further view of Yamaura et al. (U.S. Patent Number 4,668,594), Takada et al. (U.S. Patent Number 5,958,281) or Mohwald et al. (U.S. Patent Number 6,475,663). Applicants respectfully traverse this rejection.

As discussed above, Nagura et al. teaches a coating of lithium metal oxide base particles. Nagura et al., does not, however, teach or even fairly suggest a coating that is a mechanofused mixture as required by the claims.

Yamaura et al., Takada et al. and Mohwald et al. teach lithium phosphate and iron phosphate as conductive materials. Yamaura et al., Col. 5, lines 33-37; Takada et al, Col. 1, Lines 32-55 and Mohwald et al., Col. 4, lines 43-65. Yamaura et al., Takada et al. and Mohwald et al. do not teach or even fairly suggest a mechanofused mixture as required by the claims. As such, taken either singularly or in combination with each other, the cited references fail to teach all of the claim limitations. Accordingly, claim 2 is patentable over the cited reference. Thus, Applicants respectfully request that the above rejection be withdrawn.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagura et al. Applicants respectfully traverse this rejection.

As discussed above, Nagura et al. does not teach or even fairly suggest a coating that is a mechanofused mixture. Furthermore, Nagura et al. does not teach or even fairly suggest an inorganic compound to the carbonaceous material ranges between 99:1 and 60:40. As such, the cited reference fails to teach all of the claim limitations. Accordingly, claim 2 is patentable over the cited reference. Thus, Applicants respectfully request that the above rejection be withdrawn.

Claims 5 -7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagura et al. in view of either Yamaura et al., Takada et al., or Mohwald et al. Applicants respectfully traverse this rejection.

Claim 5 requires a nonaqueous electrolyte secondary battery with a mechanofused mixture including an inorganic compound and a carbonaceous material on at least part of each surface of the base particles. As discussed above, a mechanofused mixture is a new material generated by a mechanical-chemical reaction between the particles.

As discussed above, Nagura et al. teaches a coating of lithium metal oxide base particles. Nagura et al., does not, however, teach or even fairly suggest a coating that is a mechanofused mixture as required by the claims.

Yamaura et al., Takada et al. and Mohwald et al. teach lithium phosphate and iron phosphate as conductive materials. Yamaura et al., Col. 5, lines 33-37; Takada et al, Col. 1, Lines 32-55 and Mohwald et al., Col. 4, lines 43-65. Yamaura et al., Takada et al. and Mohwald et al. do not teach or even fairly suggest a mechanofused mixture as required by the claims. As such, taken either singularly or in combination with each other, the cited references fail to teach all of the claim limitations. Accordingly, claim 5 is patentable over the cited reference as are

independent claims 6-7 for at least the same reasons. Thus, Applicants respectfully request that the above rejection be withdrawn.

III. Conclusion

In view of the above amendments and remarks, Applicants submit that all claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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